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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/315,390	05/20/1999	STEPHEN CRANE	9567.4807	6469

7590 07/31/2002

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EXAMINER

ROCHE, LEANNA M

ART UNIT	PAPER NUMBER
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1771

18

DATE MAILED: 07/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/315,390

Applicant(s)

CRANE, STEPHEN

Examiner

Leanna Roche

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,9-11 and 13-36 is/are pending in the application.
- 4a) Of the above claim(s) 16-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) 25,26 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,9-11,13-24,27,28 and 33-36 is/are rejected.
- 7) ☒ Claim(s) 29-32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 15 May 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's amendments filed May 15, 2002 and May 20, 2002 have been entered and carefully considered. Claims 3 and 12 have been cancelled. Claims 25-36 have been added. Claims 16-22 have been withdrawn from consideration. Claims 1, 2, 4, 5, 9-11, 13-15 and 23-36 remain pending in this application.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: Figure 9 shows reference number 126. Figures 4-8 and 10 amended reference number 126 to read 26. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 29 is objected to because of the following informalities: in line 2 of Claim 29, delete "a boat deck cooler" and insert "a boat deck, cooler". Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuwazuru et al. (USPN 4579774) substantially as set forth in Paper No. 13, paragraphs 9.

6. Claims 1, 2 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Steward et al. (USPN 4211590) or Stamper et al. (USPN 4256797) substantially as set forth in Paper No. 13, paragraphs 10.

7. Claims 1, 4, 5, 24 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Akimoto et al. (USPN 4986860) substantially as set forth in Paper No. 13, paragraphs 11.

With regard to newly added claim 36, Akimoto discloses a surface layer and a foamed layer both comprised of vinyl chloride and acrylic. Therefore, Akimoto discloses a composite that avoids the use of styrene.

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8. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Honda et al. (USPN 4278728) substantially as set forth in Paper No. 9, paragraph 12 and Paper No. 13, paragraphs 12.

9. Claims 1, 2, 11, 24, 27, 28, 33 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Paddock (USPN 4440825).

Paddock is directed to a multi-layer laminate with a structure comprising solid AES skin / solid ABS substrate / foamed ABS core / solid ABS substrate / solid AES skin. With regard to Claims 1 and 2, the solid ABS substrates of Paddock read on Applicant's outer and inner layers of acrylic and the foamed ABS core of Paddock reads on Applicant's acrylic foam core. With regard to claim 11, Paddock discloses that the solid ABS substrate layers are intermediate adhesion-promoting layers, i.e. adhesive layers. Therefore, the solid AES skin layers of Paddock read on Applicant's outer and inside layers of acrylic, the solid ABS substrates of Paddock read on Applicant's acrylic glue, and the foamed ABS core of Paddock reads on Applicant's acrylic foam core. Paddock teaches that their laminates are useful for producing various articles including camping bodies, boat hulls, boat decks, and luggage or the like. These read on camper tops, boat hulls, boat decks and coolers.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 2 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akimoto et al. (USPN 4986860) as applied to claim 1 above, and further in view of Steward et al. (USPN 4211590) or Stamper et al. (USPN 4256797) substantially as set forth in Paper No. 13, paragraphs 14.

12. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steward et al. (USPN 4211590) or Stamper et al. (USPN 4256797) as applied to claims 1 and 2 above, and further in view of Fay (USPN 4053545) substantially as set forth in Paper No. 13, paragraphs 15.

13. Claims 9 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akimoto et al. (USPN 4986860) as applied to claim 1 above, and further in view of Fay (USPN 4053545) substantially as set forth in Paper No. 13, paragraphs 16.

14. Claims 10, 11 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akimoto et al. (USPN 4986860) in view of Steward et al. (USPN 4211590) or Stamper et al. (USPN 4256797) as applied to claim 2 above, and further in view of Fay (USPN 4053545), substantially as set forth in Paper No. 13, paragraphs 17.

Allowable Subject Matter

15. Claims 25 and 26 are allowed because the prior art does not teach or suggest a composite structure comprising an acrylic foam adhered to an outer layer comprised of acrylic-ABS.

16. Claims 29-32 would be allowable if rewritten or amended to overcome the objection over Claim 29, set forth in this Office action.

Response to Arguments

17. The new Abstract is sufficient to overcome the previous objection to the specification set forth in Paper No. 13, paragraph 3. The proposed drawing corrections filed May 15, 2002 are approved.

18. Applicant's arguments filed May 15, 2002 have been fully considered but they are not persuasive.

19. KUWAZURU

Applicant argues that the styrene/acrylic acid copolymer of Kuwazuru does not teach an acrylic. However, just as Applicant's claimed acrylic and polyvinylchloride copolymer reads on an acrylic foam core or an acrylic outer layer, a styrene and acrylic acid copolymer reads on an acrylic foam core or acrylic outer layer.

Applicant contends that the camper top of the present invention is not the liner of Kuwazuru because "one is a solid structural element which is remote at best from a liner

for a ceiling.” This argument is not found persuasive because Applicant’s claims provide no structural limitations with regard to the camper top. There are no limitations with regard to the structure of the camper top outside the composite material limitations indicated in Claims 1 and 2. Additionally, there is no indication in the claims that the camper top is in fact a “solid structural element.” Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, because Kuwazuru reads on the material limitations of Claims 1, 2, and 24, Kuwazuru anticipates the claimed invention.

20. STEWARD

Applicant contends that Steward “does not disclose the use of an outer layer of acrylic-polyvinylchloride and a foam core layer of acrylic-polyvinylchloride.” However, it is noted that Claims 1, 2 and 24 do not claim an outer layer of acrylic-polyvinylchloride and a foam core layer of acrylic-polyvinylchloride. Therefore, this argument is not found persuasive.

Applicant also contends that Steward “does not specifically disclose an outer layer which may be comprised of either an acrylic-ABS or acrylic-polyvinylchloride.” Again, Claims 1, 2 and 24 do not claim an outer layer of acrylic-polyvinylchloride or an outer layer of acrylic-ABS. Therefore, this argument is not found persuasive.

With regard to Applicant’s statement that “reliance on a polystyrene polymer with additives as being an acrylic polymer does not make sense”, as stated above,

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Applicant's claims show that an acrylic and polyvinylchloride copolymer reads on an acrylic foam core or acrylic outer layer. Therefore, a styrene and acrylic copolymer reads on an acrylic foam core or acrylic outer layer.

Applicant also contends that Steward "does not specifically disclose the use of an acrylic adhesive to bind the outer film layers to the foam core." Again, Claims 1, 2 and 24 do not claim the use of an acrylic adhesive to bind the outer film layers to the foam core. Therefore, this argument is not found persuasive.

Applicant contends that the camper top of the present invention is not the perforated resilient headliner of Steward because "the camper top is not the same as a steel covered roof with a resilient liner." This argument is not found persuasive because Applicant's claims provide no structural limitations with regard to the camper top. There are no limitations with regard to the structure of the camper top outside the composite material limitations indicated in Claims 1 and 2. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, because Steward reads on the material limitations of Claims 1, 2, and 24, Steward anticipates the claimed invention.

21. STAMPER

Applicant argues that the styrene/acrylic copolymer of Stamper does not teach an acrylic. However, just as Applicant's claimed acrylic and polyvinylchloride copolymer

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reads on an acrylic foam core or an acrylic outer layer, a styrene and acrylic acid copolymer reads on an acrylic foam core or acrylic outer layer.

Applicant contends that the camper top of the present invention is not the contoured resilient headliner of Stamper because the headliner of Stamper is “for the interior of an automobile.” This argument is not found persuasive because Applicant’s claims provide no structural limitations with regard to the camper top. There are no limitations with regard to the structure of the camper top outside the composite material limitations indicated in Claims 1 and 2. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, because Stamper reads on the material limitations of Claims 1, 2, and 24, Stamper anticipates the claimed composite.

22. AKIMOTO

Applicant contends that Akimoto “specifically teaches styrene, and specifically states that ‘polystyrene is especially preferred’ at column 2, line 35.” However, column 2, line 35 of Akimoto specifically states “polyvinyl chloride with cross-linking for a lower layer”. Additionally, the only mention of styrene in Akimoto is to disclose the possible use of vinyl chloride and styrene copolymers, but no preference is indicated.

Applicant argues that Claim 1 “defines the composite structure so as to avoid the inclusion of such toxic materials.” However, there is no reference to avoiding toxic materials in the language of Claim 1. Although the claims are interpreted in light of the

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specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Additionally, it is noted that Applicant's Claims 25, 26 and 29-32 are directed to composites which contain styrene in the form acrylic-ABS. Therefore Applicant's argument concerning avoidance of toxic substances such as styrene is negated by the fact that Applicant's claims indicate the incorporation of styrene.

Applicant argues that Akimoto is directed to non-rigid foam sheets suitable for an interior trim material particularly for vehicles, and that Applicant's present invention is directed to other purposes and objects, such as boat hulls, decks, camper tops, and coolers...which can be hard and stiff. However, Applicant's claimed boat hulls, decks, camper tops and coolers lack any structural limitations, and Applicant's claims do not specify any rigidity or hardness. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Because Akimoto reads on the material limitations of Claims 1, 4, 5 and 24, Akimoto anticipates the claimed invention.

23. AKIMOTO IN VIEW OF STEWARD OR STAMPER

With regard to Akimoto in view of Steward or Stamper, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it

takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Because Akimoto, Steward and Stamper are all directed the same art, i.e. to the production of vehicle trim panels, a person of ordinary skill in the art would have found it obvious to combine their teachings to produce vehicle trim composites of greater strength and aesthetic appeal.

24. STEWARD OR STAMPER IN VIEW OF FAY

With regard to Steward or Stamper in view of Fay, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In the present case, it has been established that Steward and Stamper disclose the use of "appropriate" adhesives to produce a tenacious bond between outer film layers and the foam core. Thus, one of ordinary skill in the art must determine what would be considered an "appropriate" adhesive. Fay teaches that an acrylic adhesive provides advantages for bonding an acrylic containing sheet to a styrene containing foam. Because Steward and Stamper are both comprised

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of acrylic containing outer layers with styrene containing foam layers, it would have been obvious to the skilled artisan at the time this invention was made to use the acrylic adhesive of Fay as the "appropriate" adhesive in the composites of Steward or Stamper.

25. AKIMOTO IN VIEW OF FAY / AKIMOTO OR STEWARD OR STAMPER IN VIEW OF FAY

These rejections stand for the reason set forth above in paragraph 24 with regard to Steward or Stamper in view of Fay.

26. HONDA

It is noted that Applicant has failed to provide any response to the rejection of Claims 1 and 5 under 35 USC 102(b) by Honda et al. (USPN 4278728) set forth in Paper No. 13 paragraph 12 and Paper No. 9, paragraph 12. Therefore, the rejection over Honda still stands.

27. NEWLY ADDED CLAIMS

Applicant's arguments with respect to newly added claims 25-36 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

28. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

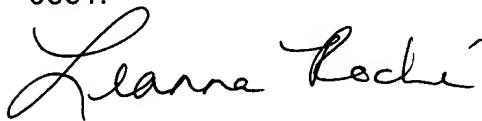
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leanna Roche whose telephone number is 703-308-6549. The examiner can normally be reached on Monday through Friday from 8:30 am to 6:00 pm (with alternate Mondays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



lmr
July 25, 2002



ELIZABETH M. COLE
PRIMARY EXAMINER